
Marine Physical Laboratory

Inversion of Geophysical Parameters in Shallow Water

William A. Kuperman

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Final Report

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Abstract

A joint effort with SACLANTCEN concerning inversion of geophysical parameters in shallow water regions was undertaken. Data from previous experiments were analyzed and techniques for inverting the data was modified and employed. The data acquisition system and computing facilities at SACLANTCEN were used in this effort. Nonlinear inversion techniques employing simulated annealing was also used.

Research Summary

Data from the SACLANTCEN experiments have been analyzed using the folcalizaton tehcnique of Collins and Kuperman. This yielded estimates of the geophysical parameters. The results were published below.:

Publications

"Experimental confirmation of focalization," A. Kristensen, A. Caiti, F. Ingenito, M. D. Max, J. M. Berkson, M. D. Collins L. T. Fialkowski, N. C. Makris, B. E. McDonald, J. S. Perkins, W. A. Kuperman. IIN: Full Field Inversion in Ocean and Seismic acoustics (Editors: O. Diachok P. Gerstoft, A. Caiti, H. Schmidt), Kluwer Academic Publishers, PP. 153-156, Dordrecht, Holland (1995)

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